Gulf of Mexico Harmful Algal Bloom Bulletin

25 August 2005

National Ocean Service

National Environmental Satellite, Data, and Information Service

Last bulletin: August 22, 2005

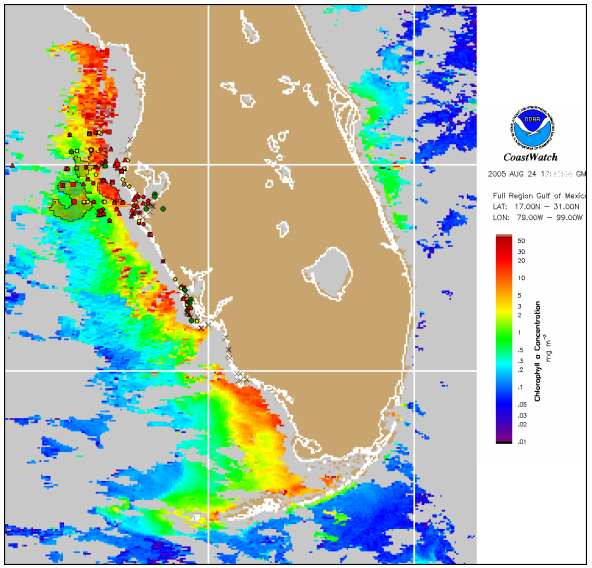
Conditions: A harmful algal bloom has been identified from northern Pinellas County to northern Lee County. The following impacts are possible today through Saturday: patchy very low impacts from northern Pinellas to northern Lee Counties. Tropical storm conditions are possible Saturday night and Sunday. The following impacts are possible Saturday night through Monday: patchy moderate to high impacts in northern Pinellas to northern Sarasota, and northern Lee Counties; patchy low to moderate impacts in southern Sarasota and Charlotte Counties. Due to the low oxygen water offshore, more dead fish may be found on the beach than normal. Dead fish smell, while unpleasant, does not produce the same respiratory irritation as red tide. Discolored water is possible.

Analysis: The bloom persists offshore of Pasco County to northern Lee County. Near the northern extent of the bloom, imagery indicates high chlorophyll concentrations >20μg/L at 28°11'N 83°3'W, 30 km (19 miles) WNW of Palm Harbor. A high chlorophyll feature has formed west of Charlotte Harbor, near the southern extent of the bloom. Within this area imagery indicates a chlorophyll concentration >20μg/L at 26°37'N 82°22'W, 33 km (20 miles) NW of Sanibel.

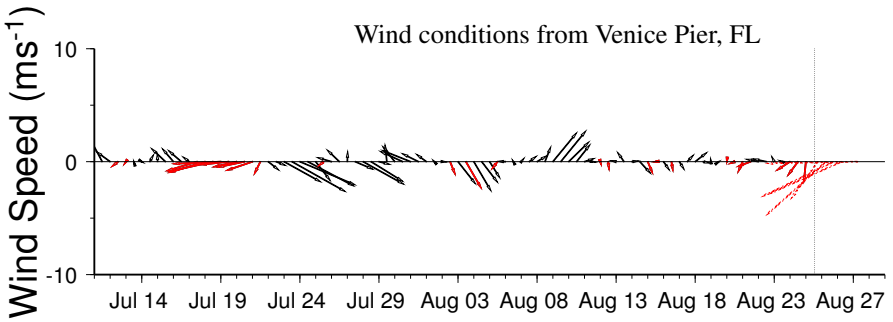
Upwelling-favorable winds through Saturday may intensify the bloom. Subsurface samples of *Karenia brevis* have been confirmed. Samples indicate mixed blooms off of Pinellas County, with Psuedo-nitzschia nearshore and Trichodesmium offshore. Several recent samples from offshore of Pinellas County had high *Karenia brevis* concentrations. Tropical Storm Katrina may bring these higher concentrations, as well as dead fish, onshore this weekend. As Katrina moves offshore and north, strong west winds may have a similar effect on Monday. Tropical storm conditions this weekend may cause resuspension in coastal waters. Discolored water may be reported.

Non-harmful blooms have been confirmed off of Big Bend and Naples. Reports of discolored water are likely.

Bronder, Fenstermacher

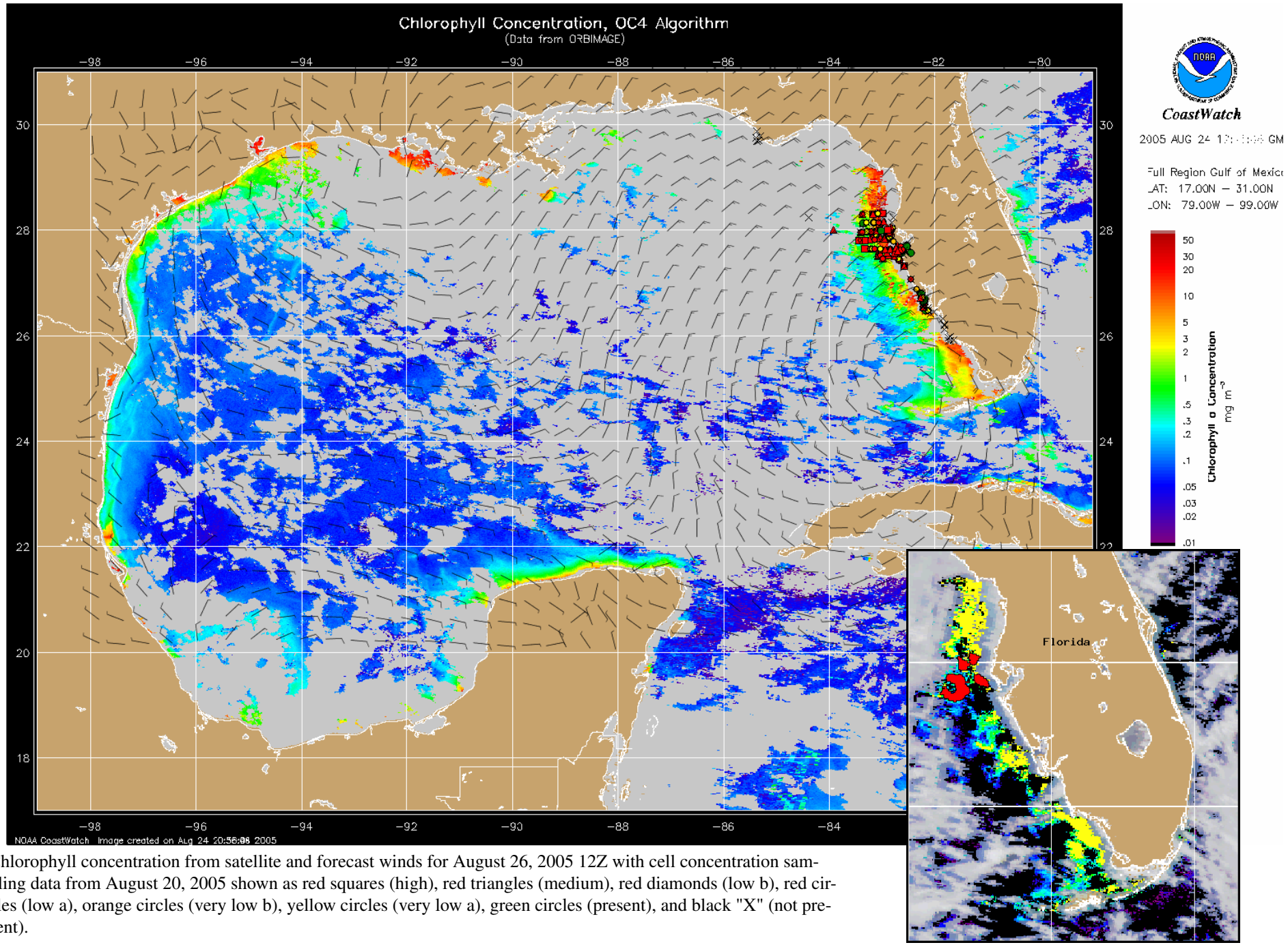


Chlorophyll concentration from satellite with HAB areas shown by red polygon(s). Cell concentration sampling data from August 20, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).



Wind speed and direction are averaged over 12 hours from measurements made on buoys. Length of line indicates speed; angle indicates direction. Red indicates that the wind direction favors upwelling near the coast. Values to the left of the dotted vertical line are measured values; values to the right are forecasts.

Winds will be north (15 kts, 8 m/s) today, north (20 kts, 10 m/s) tomorrow, northeast (35 kts, 18 m/s) Saturday. Tropical storm force winds are possible Saturday through Sunday, weakening and westerly (20 kts, 10 m/s) on Monday.



Chlorophyll concentration from satellite and forecast winds for August 26, 2005 12Z with cell concentration sampling data from August 20, 2005 shown as red squares (high), red triangles (medium), red diamonds (low b), red circles (low a), orange circles (very low b), yellow circles (very low a), green circles (present), and black "X" (not present).

Blooms shown in red (see p. 1 analysis)